5. *The Oedemeridae of South Africa with Notes on some other African Oedemeridae (Coleoptera).*—By K. G. Blair, B.Sc., F.E.S.

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The family *Oedemeridae* seems to be but poorly represented in the African fauna ; not only is the number of species small but the number of individuals is also scanty. It is true that Fairmaire has described about fifteen species from Madagascar, while Pic (1922) has recently named several more from Madagascar and from tropical Africa ; but from South Africa one only, *Ananca hottentota*, Fairm., has been hitherto described. Others have existed for many years both in the British Museum and in the South African Museum, and it is at the request of the late Dr. L. Péringuey that the present attempt to work out this South African material is undertaken.

Of the forms now dealt with two only, one of which is an almost cosmopolitan species, can claim to have anything like a general distribution in South Africa ; of the remainder there exists usually but a single record, though in many cases two or more individuals are noted of each. Though not included in the fauna of South Africa proper, which for convenience sake may be taken as south of the Zambesi, certain species from Nyasaland, which bear a close affinity with those of Mashonaland, are included ; I take the opportunity to deal also with two further hitherto undescribed forms, one from Uganda and one from West Africa.

The classification adopted is that given by Seidlitz (1899).

Key to the Genera of South African Oedemeridae.

1. (2) Anterior tibiae with a single spur ; antennae of ♂ 12-jointed. (sub. fam. *Nacerdinae*) *Nacerda* Steph.
2. (1) Anterior tibiae with two spurs ; antennae in both sexes 11-jointed.
3. (10) Last joint of maxillary palpi more or less triangular, its apex at least as long as the inner side ; eyes at most with a broad shallow emargination near the antennae . . . . . sub. fam. *Asclerinae*
4. (5) Eyes entire ; antennae inserted some distance in front of them ; colour blackish . . . . . *Melananthia* nov.
5. (4) Eyes with a broad shallow emargination in front ; antennae inserted close to them ; colour in part at least fulvous.
6. (7) Wings abortive. . . . . *Apterosessinia* nov.

7. (6) Wings fully developed.
8. (9) Mandibles bifid at apex . . . . . *Ananca* F. and G.
9. (8) Mandibles simple at apex . . . . . *Sessinia* Pasc.
10. (3) Last joint of maxillary palpi nearly parallel sided, its apex very short in relation to its length ; eyes subangularly emarginate.
(sub. fam. *Oedemerinae*) *Asclerosibutia* Pic

Nacerda melanura, L.

Linnaeus, Syst. Nat., 1758, vol. i, p. 403 (*Cantharis*).

Rufo-fulvous, with the tips of the elytra, the legs and the underside blackish.

The head is withdrawn not quite as far as the eyes in the prothorax ; the eyes moderately deeply emarginate ; the antennae inserted not quite in the emargination, the mandibles bifid at the tips.

♂. Rather slighter in build than the ♀, the head and sides of the thorax usually more or less clouded with fuscous ; the pygidium and 5th ventral segment of the abdomen both deeply cleft at apex (in the ♀ the apex of the pygidium has a small angular emargination).

Length.—9–13 mm.

Localities.—Table Mountain (W. Bevins) ; Darling (L. Péringuey) ; Grahamstown ; Touws River, November 1883 (L. Péringuey) ; Durban (J. P. Cregoe and H. W. Bell-Marley) ; also in Europe, Asia, North and South America.

This widely distributed species of Palaearctic origin is probably distributed largely by driftwood, in which the larva frequently lives. Apart from the generic characters, it is readily distinguished by its colour pattern from all other South African members of the family. From certain species of *Asclerosibutia* which also have the tips of the elytra black it is at once separated, in addition to its generic differences, by its head being concolorous with the prothorax.

Melananthia gen. nov.

Elongate, subcylindrical, moderately densely pubescent. Head, excluding labrum, about as long as its width between the eyes, the latter strongly convex, entire, a little longer than wide, their long axis (viewed laterally) very oblique ; antennae slender, second joint about $\frac{1}{3}$ as long as third, 11-jointed in both sexes, inserted about equidistant from the eyes and the base of the mandibles ; labrum about half as wide again as long ; mandibles bifid at apex ; maxillary palpi with last joint triangular, apex about as long as inner side,

rather more than half as long as outer ; last joint of labial palpi with sides equal and slightly divergent, apex rounded. Prothorax cordiform. Elytra parallel sided for three-quarters of their length, each with four costae extending almost to apex. Anterior tibiae with two small spurs at apex, penultimate joint of all the tarsi expanded and clothed beneath with dense fulvous pubescence, with a slight development of similar pubescence on the antepenultimate joints.

♂ with 5th ventral segment only about half as long as 4th ; 6th segment divided, forming two long narrow lobes.

♀, 5th ventral segment produced in a triangular lobe.

Closely related to *Chrysanthia* Schm., from which it differs in the lack of metallic colour, in having the head withdrawn to the eyes in the prothorax, the second joint of the antennae shorter, the labrum broader, etc.

M. costipennis sp. n.

Black, with the head and prothorax mainly testaceous, the antennae, mouth parts, except mandibles and mentum, and the gula, a spot on the vertex, and a median elongate patch on the thorax black ; legs entirely black except the front coxae yellow. Thorax a little wider than long, with a broad transverse depression across the middle, less intense in the median area ; pubescence of head and thorax golden except on the black areas, where it is black, and directed mainly towards the median line, near which it slopes forwards ; puncturation rather strong, coarser and more sparse on the depressed areas. Elytra with the margins and four costae on each strongly raised and shining, with rather sparse decumbent black pubescence directed backwards ; intervals densely granulose, with cinereous decumbent pubescence on each interval directed backwards and towards the middle line, so that it appears denser and whiter in the middle of each interval.

♂. The short 5th ventral segment with a small median projection and the sides more strongly produced, the 6th segment completely exposed, as two long laminae, separated and twisted in apical third, exposing a stout pointed median piece, dorsal to which projects the aedeagus, the terminal knob of which is separated by a sharp bifid notch on both dorsal and ventral sides ; again dorsal to this are two slender brown chitinous rods, the lateral lobes of the tegmen.

♀. The 5th ventral segment much longer than the 4th, the sides

emarginate before the apex, thus forming a broad triangular median lobe ; apex of pygidium entire.

Length.—9–12 mm.

Locality.—Pondoland, Port St. John, Oct. and Dec. 1923 (R. E. Turner).

1 ♂ and 3 ♀♀ of this striking species are before me. The strongly costate elytra, the effect of which is enhanced by the diversity of colour of the pubescence and its peculiar incidence, render the species at once recognisable.

Melananthia senex, sp. n.

Elongate, subparallel, black with a slight aeneous lustre, covered with a conspicuous decumbent white pubescence ; the antennae, palpi, mandibles (with the exception of the tips), and legs, more or less testaceous.

Head across the eyes as wide as the prothorax, sharply constricted immediately behind the eyes ; the latter almost contiguous with the front of the prothorax, not emarginate in front, strongly convex and prominent, the distance between them notably greater than that between the antennae ; antennae inserted some distance in front of the eyes, slender, second joint elongate, $\frac{1}{3}$ as long as 3rd, 3rd to 10th cylindrical, decreasing slightly in length ; mandibles bifid at apex ; maxillary palpi normal, last joint triangular, not much longer than the preceding, its inner edge about as long as the apical. Thorax slightly longer than wide, feebly enlarged in anterior half, anterior border rounded, base bisinuate, disc convex without definite impressions, finely and evenly granulate-punctate except for a smooth median line in the posterior half ; pubescence rather irregularly inclined, directed mainly forwards on the disc, transversely inwards along the basal border, leaving a narrow sub-basal line as well as the smooth line on the disc free of pubescence. Elytra parallel in basal half, thence arcuately narrowed to apex, sutural border slightly raised, disc punctured similarly to the thorax, pubescence directed backwards somewhat obliquely in alternating directions, leaving three rather indistinct dark lines where it is less crowded. Anterior tibiae with two spurs, basal joint of posterior tarsi a little longer than the rest together, penultimate joint cordiform, deeply excavate above, slightly wider than the preceding, claw-joint about as long as second ; claws subdentate within at the base.

Length.—11 mm.

Locality.—Cape Town, 20th December 1911 (K. H. Barnard).

The type, ♀, is unique in the British Museum.

Differs from the type species of the genus in its more elongate, less cordiform thorax, and in the elytral costae being indicated by the trend of the pubescence rather than definitely present. With the discovery of the ♂ it may be found that a new genus is required for its reception. The uniformly blackish colour of the body, to which the conspicuous white pubescence gives a slate-grey appearance, at once distinguishes it from all other South African members of the family. In this respect it resembles the Egyptian *Probosca pallipes*, Oliv., but the latter has the eyes much less prominent, emarginate in front, and separated above by a distance scarcely greater than that between the antennal bases.

Apterosessinia gen. nov.

Head sunk to the eyes in the prothorax; eyes large prominent, broadly but shallowly emarginate in front, separated by a space about equal to that between the antennal bases; antennae inserted close to the eyes, filiform, 2nd joint about $\frac{1}{4}$ as long as 3rd, mandibles dissimilar, left simple, right with a small tooth above before the apex; palpi not unusually large, last joint triangular, outer edge sinuate, inner much shorter than the apical. Thorax cordiform, rounded in front, disc convex without marked impressions. Elytra not much wider than the thorax, parallel, each separately narrowed and rounded at apex, hence dehiscent for some distance before apex, all four costae faintly evident; wings vestigial; pygidium exposed, sides convergent from base, apex broadly truncate; last ventral segment subtriangular, sinuate on each side and rounded at apex, not attaining tip of pygidium. Anterior tibiae with two spurs, tarsi slender, 1st joint of posterior tarsi as long as the rest together including the claws, penultimate joint cordiform, deeply excavate above, spongy pubescent beneath; claw joint as long as 2nd, more than half its length projecting beyond the penultimate, claws with a long curved tooth on inner side. Sexes very similar except that the ♀ is very much larger than the ♂.

The new species for which this genus is proposed bears ε striking resemblance to the New Zealand form *Thelyphassa diaphana*, Pasc. though differing from it in numerous details. In the dissimilar mandibles it resembles *Alloxacis* Horn, though its micropterous state and projecting pygidium give it a very different aspect. From *Sessinia* it differs, besides being subapterous, in the toothed claws. The latter might almost be described as "split" as in the Meloïdae, the tooth being slender and curved, almost as long as the claw itself.

Apterosessinia peringueyi, sp. n.

Elongate, parallel, except for the eyes and the tips of the mandibles entirely testaceous, clothed with a moderately dense decumbent pale pubescence.

Head more or less nitid, finely and not very densely punctate. Thorax longer than wide (scarcely so in ♀), anterior margin rounded, sides strongly sinuate, hardly wider than the head across the eyes in ♂, considerably wider in ♀, base strongly bisinuate with raised border; disc punctured as the head, pubescence mainly directed obliquely inwards at the sides and forwards in the middle. Elytra scarcely wider than the widest part of the thorax, parallel, nearly flat behind, much more opaque than the thorax, but little more densely punctate and pubescent, reaching little beyond the base of the pygidium. Wings aborted, parallel, about half the length of the elytra.

♂. Eyes larger and more prominent, thorax more elongate, more strongly sinuate at the sides. The genital armature seen from beneath, lying within the concavity of the pygidium, exhibits the following pieces, viz., 6th ventral segment consisting of a pair of lanceolate lobes lying horizontally, each of these near the base is suddenly expanded to form a large unciform process which nearly meets its fellow; between these is a median slender, clavate, hairy process, its tip not quite attaining the tips of the above-mentioned lobes; dorsal to this the tegmen gives off two somewhat scimitar-shaped lobes held vertically between the lobes of the 6th segment and projecting a little beyond them, while above them lies the median lobe, flattened laterally with on each side before the tip a fine barb on the ventral edge (cf. *Oncomera*, Sharp and Muir, Trans. Ent. Soc. Lond., 1912, p. 554, pl. lxx, fig. 181).

Length.—(Average) 13 mm. (9–18).

♀. Larger and more stoutly built, eyes smaller and less convex, thorax shorter, less strongly sinuate at the sides, considerably wider than the head across the eyes; pygidium and 5th ventral segment very similar to those of the ♂; colour a little redder.

Length.—20 mm.

Localities.—Cape Province, Mossel Bay, 1913 (J. H. Power); Cape Town, 1915, and Muizenberg, 1906 (Dr. L. Péringuey).

All from the South African Museum.[1]

[1] The types of this and of other species described from the South African Museum have been generously presented to the British Museum.

Ananca Fairm. and Germ.

To this genus, originally proposed for certain Chilian species, I assign numerous *Sessinia*-like forms which differ from *Sessinia* Pasc. (type *livida*, F.) in having the mandibles bifid at the apex. This character is not always easily perceptible from above, especially when the jaws are closed, but if examined from beneath the deep groove that leads up to the apex can usually be seen even when the extreme tips are concealed. Fairmaire used the name for a considerable number of species from Madagascar, though some of these no doubt belong elsewhere. His remarks (1897) on the excessive rarity of the males of most of the species are not borne out by the material now before me, but there is reason to suppose that he frequently failed to recognise this sex. From the description he gives of the ♂ characters of *A. helvola*, Klug, a species unknown to me, it would appear to be wrongly placed in this genus, since he describes a strong sexual dimorphism in the apparent terminal segments of the abdomen, whereas in *Ananca* as here understood such dimorphism is remarkably slight; the probability is that many of the specimens presumed by Fairmaire on account of the simple abdomen to be female were in reality male. When the apex of the abdomen gapes the genitalia, enclosed between the lobes of the 6th ventral segment, can usually be seen lying within the hollow of the pygidium; the terminal papillae of the ovipositor of the ♀ usually at once make that sex recognisable.

Key to the South African Species of Ananca.

1. (6) Antennae, palpi, tibiae and tarsi black; head and thorax, underside, and femora fulvous.
2. (5) Elytra black, narrowly bordered with flavous, sometimes with a more or less broad transverse median band flavous.
3. (4) Build stout; apex of elytra more broadly flavous than the margins; transverse yellow band frequently present . *inconstans*, sp. n.
4. (3) More slender; yellow margin of elytra interrupted at apex; no transverse median band . . . . . *marginipennis*, sp. n.
5. (2) Elytra fulvous . . . . . *nigrimembris*, sp. n.
6. (1) Antennae, palpi and legs pale.
7. (8) Antennae annulated, apical half of the joints fuscous; colour brownish testaceous . . . . . *hottentota*, Fairm.
8. (7) Antennae and legs uniformly pale.
9. (12) Elytra finely and densely punctate and pubescent, not paler than the thorax; abdomen not fuscous.
10. (11) Colour brownish testaceous; last joint of palpi normal, triangular . *holoxantha*, Har.

11. (10) Colour pale greyish fulvous, elytra with the base and a transverse band beyond the middle indistinctly darker; last joint of palpi subcrescentic *subfasciata*, sp. n.

12. (9) Elytra rather sparsely punctate and pubescent, paler than the head and thorax; abdomen fuscous . . . . *fusciventris*, sp. n.

Ananca inconstans, sp. n.

Robust, reddish yellow, with the antennae, palpi, tibiae and tarsi, and the greater part of the elytra black; the latter have an orange border expanded at the apex, and frequently an irregular band of the same colour, varying greatly in width in different specimens, across the middle.

Head sunk almost to the eyes in the prothorax, moderately strongly punctate, each puncture with a scarcely visible hair. Eyes large, not very convex, widely emarginate in front, slightly more approximate above than the antennal bases. Antenna inserted close to eyes, rather stout, filiform, 2nd joint about $\frac{1}{3}$ as long as 3rd. Mandibles bifid at apex; palpi slender, last joint about $\frac{1}{2}$ longer than the second, its outer edge sinuate, the inner edge not very divergent (about 30°), nearly as long as the apical. Thorax cordiform, a little wider than the head across the eyes, about as wide as long, widest near the front thence sharply narrowed anteriorly and more gently so towards the base, which is bisinuate with a raised border; disc uneven, with a broad depression across the anterior half, with extensions towards the anterior angles, the middles of the sides, and to a median basal depression; surface strongly, rather densely, punctate with scarcely visible pubescence. Elytra widest behind the middle, not very convex transversely, finely granulate, with a double pubescence, very fine decumbent with sparser stronger semi-erect hairs interspersed. Tarsi stout, basal joint of posterior tarsi longer than the rest together, penultimate joint cordiform, excavate above, with a dense golden pubescence beneath, scarcely wider than the preceding.

Sexes very similar; ♂, pygidium cleft at apex, genital armature very similar to that of *Apterosessinia* described above, but stouter, with median lobe more pointed, and the subapical barbs stouter and more divaricate, thus approaching the form of an arrow head, with a second pair of barbs some distance behind them.

Length about 13 mm. (10–17 mm.).

Localities.—Nyasaland, Mlanje, 8th November 1912 (S. A. Neave); Zomba (H. S. Stannus); Natal, Durban, Malvern, Mpanzi R. (G. A. K. Marshall); Cape Province, Mossel Bay (Overbeek); Ngami.

The colour pattern is independent of sex, but from the limited material before me there may be some connection with the geographical distribution of the species. Thus I have forms in which the transverse bar has disappeared more or less entirely from Nyasaland and Natal (Malvern and Durban); the form with the band normal from Natal and Ngami, that in which it has increased so as to occupy almost half the length of the elytra from Mossel Bay and Mpanzi R. Further collecting, however, may demonstrate that all these forms may occur together.

This type of coloration is very unusual in the family, though found in certain Australian species, e.g. *Copidita languida*, Blkbn. and others, and in *S. Moorei*, Montr. from New Caledonia and Fiji.

Ananca marginipennis, sp. n.

Slender, flavous, with the antennae, palpi, tibiae and tarsi, and elytra black, the latter with a narrow flavous border which is not continued round the apex; head and thorax more or less marked with fuscous.

Head not quite sunk to the eyes in the prothorax, not notably constricted behind the eyes, finely and moderately densely punctate, with a fuscous patch between the eyes though sometimes not reaching them. Eyes large, not very convex, broadly but not deeply emarginate in front. Antennae inserted close to the eyes, slightly more approximate than the latter, filiform, attaining (♂) about the middle of the abdomen, 2nd joint rather more than $\frac{1}{3}$ the length of the 3rd; mandibles bifid at apex; last joint of palpi with the inner edge little more than $\frac{1}{2}$ as long as the apical. Thorax in ♂ not quite as wide as the head across the eyes, slightly longer than wide, in ♀ a little wider than the head and about as wide as long, disc punctured and pubescent as the head, with a large shallow depression on each side about the middle. Elytra parallel, about 3 times as long as wide, each with 4 raised lines of which the 2 outer are very faint, finely and moderately densely punctate, with the intervals minutely rugose, pubescence simple, golden, and moderately dense. Anterior tibiae bispinose, tarsi moderately stout, basal joint of posterior tarsi longer than the rest together, penultimate joint cordiform, wider than the preceding, deeply excavate above; all the joints except the claw-joint clothed beneath with a dense golden pubescence, that on the second joint apparently of a velvet-like character similar to that of the penultimate.

Length.—9–11 mm.

Locality.—Mashonaland, Chirinda, October 1905; Mt. Chirinda, November–December 1911 (G. A. K. Marshall).

Of the African forms this only in any way resembles the unbanded form of *S. inconstans*, sp. n., but is of much more slender build, and may be at once recognised by the simple elytral pubescence, by the less approximate eyes, and by the yellow margin of the elytra being interrupted at the apex. Like *S. inconstans* it bears a close superficial resemblance to certain Australian forms, e.g. *S. Macleayi*, Champ. and *S. punctum*, Macl.

Ananca nigrimembris, sp. n.

Clear luteous with the maxillary palpi (antennae wanting), tibiae, tarsi, and apices of the femora black.

Head not withdrawn as far as the eyes in the prothorax, not constricted behind the eyes, rather strongly punctate but with very feeble pubescence; eyes large, moderately prominent, broadly but feebly emarginate in front, slightly wider apart than the antennal bases; mandibles bifid at apex, maxillary palpi slender, last joint about twice as long as the preceding, outer and apical edges scarcely diverging, inner edge very short. Thorax longer than wide, scarcely wider than the head across the eyes, sides strongly sinuate, base feebly bisinuate with raised border, disc depressed with a median shallow impression before the base and a pair in front of the middle, surface rather strongly punctate, with weak forwardly directed pubescence. Elytra elongate, parallel, more opaque than the thorax with four raised lines, pubescence stronger than that of thorax, golden. Posterior tarsi slender, penultimate joint scarcely wider than the preceding, both, and the apex of the basal joint, with dense golden pubescence beneath; claws simple.

Length.—9 mm.

Locality.—Nyasaland: Mlanje, 16th November 1912 (S. A. Neave).

The single specimen, sex not determined, is distinct from every other African species known to me by its black appendages in contrast with the yellow body. It may prove to be synonymous with *S. bicoloripes*, Pic (1922) from San Thomé, which is described as being similarly coloured, but the description is too meagre for definite recognition, and in view of the wide difference in the localities, and of the apparent distinctness of the South and East African forms from the West African, the probability appears to be in favour of their being distinct.

Ananca hottentota, Fairm.

Bull. Soc. Ent. France, p. 71, 1883.

Elongate, brownish testaceous, the antennae with the apical half of joints 3–7 (the rest wanting) fuscous, 2nd joint $\frac{1}{3}$ as long as the 3rd ; thorax clouded with fuscous at the sides.

Head comparatively coarsely punctate and finely rather sparsely pubescent ; eyes widely but shallowly emarginate, mandibles bifid at apex, last joint of palpi triangular, inner side as long as apex. Thorax subcordiform, widely depressed above, with the usual depressions rather feeble, sides rather strongly constricted about the middle ; surface rather coarsely and sparsely but somewhat irregularly punctate, with fine sparse pubescence. Elytra 3 times as long as together wide, a little darker than the thorax, and much more finely and densely punctate, all 4 raised lines evident. (Legs defective.)

Length.—13 mm.

Locality.—Mossel Bay, January 1899 (T. W. Overbeek), in South African Museum. (Described from the Cape.)

I have not seen any authentic individual of this species, but Dr. Péringuey informs me that he thinks the defective ♀ above described is of the same species as that he had originally sent to Fairmaire. It agrees fairly well with the description given by the latter author, but is a little longer. The annulate antennae are very striking and at once distinguish the species from the other African representatives of the family.

Since the above was written I have received a further pair of *A. hottentota* from Tokai, Cape Province, 10th October 1923 (N. L. King) from under the bark of eucalyptus trees grown from seed.

From these it is possible to supplement the above description : Femora mainly fulvous with the apex as well as the tibiae and tarsi darker.

Sexes, even as regards antennae, palpi, position of eyes, etc., very similar, but strongly dimorphic in the genitalia.

♂, 5th ventral segment broadly emarginate at apex, but the median portion again triangularly produced, 6th segment divided almost to base to form a pair of narrow divergent lobes the apices of which are twisted (*i.e.* dorsal surface becomes ventral) and curve towards one another again. Between these is the aedeagus, the lateral lobes narrow, lanceolate, the median lobe provided on its dorsal side near the apex with two barbs, of which the apical is the larger.

♀, 5th ventral segment subtriangular, the apex not quite reaching that of the pygidium.

This strong sexual dimorphism in the genital armature is very unusual in *Ananca*, and suggests that the genus may be composite (see above under *Ananca*). While there is some resemblance between the ♂ genitalia here described, and those of *A. helvola* Kl. and *A. foveicollis* Fairm. described by Fairmaire, there is no suggestion of an intimate relationship, since Fairmaire describes only 4 ventral segments to the abdomen.

The habitat under the bark of Eucalyptus, in conjunction with other previously noted resemblances of South African to Australian and New Zealand species, suggests an inquiry whether it, or its ancestors, might not have been imported with the eucalyptus, but it is certainly not assignable to any Australian species known to me, while the fact that it was described from South Africa forty years ago and was again taken in 1899 does not afford any valid support to such a theory.

Ananca holoxantha, Har.

Col. Heft., vol. xvi, p. 143, 1879.

Brownish testaceous, densely and finely punctate and pubescent throughout.

Head retractile to the eyes in the prothorax; eyes feebly convex and feebly emarginate in front; 2nd joint of antennae nearly $\frac{1}{2}$ as long as the 3rd; mandibles bifid at apex; last joint of maxillary palpi triangular, inner side nearly as long as the apex. Thorax cordiform, rounded in front, the sides gradually convergent behind, disc convex, with scarcely indicated depressions, closely and finely punctate. Elytra not 3 times as long as together wide, slightly darker than the head and thorax, with the suture narrowly paler; the usual raised lines are scarcely indicated. Tarsi slender, basal joint of posterior tarsi as long as the rest together, penultimate joint small, cordiform scarcely wider than the preceding, claw-joint projecting for $\frac{3}{4}$ of its length beyond it: claws simple.

♂ not identified.

♀ pygidium deeply cleft or bilobed at apex.

Length.—10 mm.

Locality.—Walfish Bay.

Loanda (type of von Harold).

It is with a little doubt that I assign two individuals to this species. They agree fairly well with von Harold's description, except that the

2nd joint of the antennae is evidently more than ⅓ as long as the 3rd, the elytra are not wider behind the middle, and have faint indications of the usual raised lines. Both specimens appear to be of the same sex, one of them being obviously ♀.

Ananca subfasciata, sp. n.

Pale dirty yellow with an indistinct broad dark band across the base of the elytra and another beyond the middle.

Head wider than the prothorax, slightly narrowed behind the eyes, rather short in front. Eyes large, prominent, widely but shallowly emarginate in front, distance between them rather greater than that between antennal bases. Antennae inserted close to eyes, filiform, 2nd joint about half as long as 3rd; labrum transverse, mandibles strongly curved externally, bifid at apex; maxillary palpi slender, last joint about twice as long as 2nd, outer and apical sides curved, inner very short, giving the joint a subcrescentic outline. Thorax as wide as long, strongly sinuately narrowed towards base, rounded in front, disc with a broad shallow depression across the anterior half and produced basally as a median depression, very finely and not closely punctate and pubescent. Elytra more densely and strongly pubescent than the thorax, each with 4 raised lines, the 3rd (humeral) only visible near the base. Tarsi slender, 1st joint of posterior tarsi longer than the rest together including the claws, penultimate not markedly wider than the preceding, densely pubescent beneath. ♂ pygidium slightly emarginate at apex.

Length.—6–7 mm.

Localities.—Clanwilliam, O'Okiep, November 1885 (South African Museum).

A very fragile insect, the soft teguments and indistinct colour pattern giving it the appearance of immaturity, though both the individuals before me are alike. The short head and peculiar shape of the terminal joint of the palpi are very distinct, and in conjunction with the small size and feeble coloration should render the species easily recognisable. The form of the palpi does not appear to be sexual; in both specimens they are similar, though the second, in which however the genital armature is not visible, has the pygidium entire at the apex, and is presumably ♀.

Ananca fusciventris, sp. n.

Flavous, the elytra notably paler than the head and thorax, the metasternum and abdomen fuscous.

Head retractile to the eyes in the prothorax, rather strongly but not very densely punctate and pubescent; eyes large, moderately convex, feebly emarginate in front, somewhat more approximate than the antennal bases. Antennae slender, inserted close to the eyes, 2nd joint rather more than $\frac{1}{3}$ as long as 3rd; mandibles toothed beneath at apex, curved in about a quarter circle from the front of the clypeus; maxillary palpi slender, last joint half as long again as the penultimate, the inner side about as long as the apical. Thorax longer than wide, scarcely as wide as the head across the eyes, with the usual impressions very feeble; surface more sparsely punctate than the head, punctures large, shallow, more or less pupillate, the intervening space finely alutaceous. Elytra with the usual raised lines ill-defined, rather sparsely punctate, each puncture with a rather long suberect hair. Anterior tibiae bispinose, tarsi moderately stout, basal joint of posterior tarsi as long as the rest together (excluding the claws) penultimate joint cordiform, wider than the preceding. ♂ not identified. ♀ pygidium rather long, subtriangular, entire at apex.

Length.—10 mm.

Localities.—Beira, Port. E. Africa, 1st June 1900 (G. A. K. Marshall); Cape District (?) (South African Museum).

Readily recognised among the African members of the family by its colour and its comparatively sparse and coarse pubescence. It is closely allied to *Ananca scabripennis*, Champ. (1917) from the Seychelle Islands and Christmas Island, with which the peculiar puncturation of the thorax agrees, but the elytra are more sparsely punctate with longer pubescence, and the colour of the underside is different.

Sessinia Pascoe.

In this genus are retained only those species in which the mandibles are simple at the apex, though in some cases there is a blunt tooth on the upper edge of the inner side a little before the apex. In *Ananca* the outer edge bears a deep groove, frequently visible only from beneath, a little before the apex which ultimately splits it into two sharp teeth, the upper usually the larger. Fairmaire seems to have paid no attention to this character, and it is probable that many of the species included by him in *Ananca* should really be referred here. The two genera are in other respects almost identical and have a similar distribution throughout the tropics of both hemispheres.

Though this character may appear trivial it appears to be sharply defined (in a family where good characters are scarce), and consider-

able importance has been attached to it by most recent writers on the Oedemeridae.

Champion (1917) has recently used *Oxacis*, Lec. for this genus, treating *Sessinia* as a *nomen nudum* synonymous with *Ananca*, F. and G., but I am unable to follow him in so doing. The name was proposed by Pascoe (1863) for a group of known species for which generic characters, though no name, were given by Lacordaire (1859), and appears to be perfectly valid. The first of these species quoted by Lacordaire, *Lagria livida*, F., later selected by Semenow (1894) as the type of the genus, has simple mandibles, so that *Sessinia* Pasc. may be separated from *Ananca* Fairm., with which it was formerly combined and synonymous, on these grounds, and *Oxacis* Lec., at least as applied to the African fauna, becomes a synonym of it.

Key to the South African species of Sessinia.

1. (2) Thorax without median dark vitta ; elytra with a pale spot on suture *clarimacula*, sp. n.
2. (1) Thorax with median dark vitta.
3. (4) Eyes separated by a distance notably less than the length of the 3rd joint of the antennae ; size larger (12 mm.) . *vittatithorax*, sp. n.
4. (3) Eyes separated by a distance as great as (♂) or greater than (♀) the length of 3rd joint of antennae ; size smaller (8–10 mm.) *marshalli*, sp. n.

Sessinia clarimacula, sp. n.

Moderately robust, fusco-testaceous, the elytra a little darker than the head and thorax with an elongate suffused pale spot on the suture just before the middle.

Head sunk not quite to the eyes in the prothorax, not constricted behind them, finely and moderately densely punctate and pubescent ; eyes large, feebly convex and widely but shallowly emarginate in front ; antennae inserted close to the eyes, but slightly less approximate to one another than the latter, not attaining the posterior femora (♀, those of ♂ defective), 2nd joint half as long as the 3rd, 4th to 11th (♀) subequal, a little shorter than the 3rd ; mandibles simple at apex, very elongate and comparatively feebly curved at tip, giving the head a very elongate triangular outline ; maxillary palpi slender, last joint as long as the second and slightly longer than the third, its internal side not very divergent from the external, about as long as the apical. Thorax little wider than the head across the eyes, slightly longer than wide, rather suddenly narrowed about the middle and again constricted just before the base, with a pair of feeble

depressions in the anterior half and a median one before the base ; disc punctured and pubescent as the head, the pubescence directed mainly obliquely inwards and forwards from the sides and forwards in the middle. Elytra rather densely rugosely punctate, with dense semi-decumbent brownish pubescence turning to golden on the sutural flavous spot ; the usual four raised lines are scarcely perceptible and the suture is not markedly thickened or raised. Anterior tibiae with two spurs ; tarsi rather stout, first joint of posterior tarsi as long as the rest together (excluding the claws), penultimate joint bilobed and deeply and broadly excavate above, scarcely wider than the preceding, the pile-like pubescence of the underside divided into two areas. ♂ scarcely differing externally from the ♀, elytra rather dark and the sutural spot consequently more evident (? always), the pygidium sharply notched at apex (entire in ♀, and projecting a little beyond the elytra).

Length.—13–15 mm.

Locality.—Walfish Bay. 2 ♂♂, 2 ♀♀ in South African Museum.

This insect resembles in colour and pubescence that which I take to be *A. holoxantha*, Har. The latter, however, is very much smaller, has the mandibles bifid at apex and more strongly curved, the 2nd joint of the antennae only $\frac{1}{3}$ as long as the 3rd ; the tarsi more slender, and the ♀ has the apex of the pygidium widely and deeply notched at the apex.

Sessinia vittatithorax, sp. n.

Robust, flavotestaceous, with the head between the eyes, a median line along the thorax, and the elytra brownish, the latter with the suture and lateral margins flavous.

Head retractile to the eyes in the prothorax, finely, rather closely punctate, with indistinct pubescence. Eyes large, rather strongly convex, separated above by a space about equal to the breadth of one of them, feebly emarginate in front. Antennae filiform, nearly as long as the body, inserted close to the eyes and less approximate than these, 2nd joint $\frac{1}{3}$ as long as 3rd. Mandibles acute at apex, but each with a blunt tooth on the upper side a little before it. Maxillary palpi slender, last joint not very much larger than the third, its inner edge rather longer than the apical. Prothorax subcordate, rounded in front, base raised, disc with scarcely evident impressions, subnitid, with rather large shallow punctures not very dense near the middle and anteriorly, but becoming finer and denser towards the base, the intervening space distinctly alutaceous. Elytra widest at the

shoulders, thence very gradually narrowed for $\frac{2}{3}$ of their length, moderately finely and densely punctate and pubescent. Anterior tibiae bispinose, tarsi not very stout, basal joint of posterior tarsi as long as the rest together (excluding the claws), penultimate joint cordate, about $\frac{2}{3}$ of the claw joint projecting beyond it; claws simple. Sex not determined (probably ♂), pygidium triangular, projecting slightly beyond the elytra.

Length.—12 mm.

Locality.—Natal, Isipingo, February 1896 (G. A. K. Marshall).

The single specimen has the facies of a large group of species widely distributed in the tropics and closely resembling one another, though differing widely in the minute sculpture of the thorax. It must be very similar to *Ananca strigicollis*, Fairm. from Madagascar, but has no trace of a median sulcus on the thorax and is not darker beneath. It also resembles *A. grisescens*, Fairm. but is darker in colour, with quite different thoracic sculpture and mandibular structure. *Oxacis inquisitor*, Blkb., an Australian species, has very similar sculpture and coloration, but differs in the palpi, the inner side of the last joint being distinctly shorter than the apical.

Sessinia marshalli, sp. n.

Pale flavous, with the head between the eyes, a median line on the thorax, and the elytra, except the margins, clouded with fuscous.

Head retractile to the eyes in the prothorax, finely and rather sparsely punctate and pubescent; eyes large, prominent, feebly emarginate in front, separated above by a space greater than the width of one of them; antennae inserted close to the eyes, $\frac{2}{3}$ to $\frac{3}{4}$ as long as the body, 2nd joint about $\frac{1}{3}$ as long as 3rd; mandibles acute at apex; maxillary palpi normal, last joint about half as long again as the 3rd; inner side as long as apical. Thorax as long as or longer than wide, subcordiform, without pronounced impressions, sparsely and finely punctate and pubescent, the general surface smooth and nitid. Elytra more densely asperately punctate with stronger decumbent pubescence, without evident raised lines; apex of pygidium rounded, entire. Anterior tibiae bispinose, tarsi slender, basal joint of posterior tarsi as long as the rest together (excluding the claws), penultimate joint cordate, a little wider than the preceding.

♂ slightly smaller than the ♀, more slender, the thorax longer than wide, scarcely as wide as the head across the eyes (as wide as long in the ♀ and slightly wider than the head across the eyes) antennae longer, extending beyond the middle of the elytra.

Length.—8–10 mm.

Localities.—Natal, Isipingo, February 1896 (G. A. K. Marshall); Port Shepstone, January 1913 (K. Barnard); Pondoland, Port St John, March to May and December 1923 (R. E. Turner).

Very like a small pale-coloured form of the preceding, but the distance between the eyes is greater, and the thorax is very differently sculptured.

Ananca phthysica, Rits. from the Congo and *Sessinia lateritincta*, Pic from the Gaboon (if these are not identical) probably should also be included in this genus. The British Museum possesses specimens from Nigeria with the name *Nacerdes limbata*, Dej. (MS.), that appear to agree with the description of both. Of the same general form as *S. vittatithorax*, sp. n. they differ in having a broad though rather indistinct fuscous streak from the humerus nearly to the tip of the elytra but not including the margin. The thorax is very indistinctly darker in the middle, the anteromedian portion of the disc densely and rather coarsely punctured with a tendency to a median line free of punctures, but basally and laterally the punctures become much finer and more crowded.

Asclerosibutia, Pic.

L'Echange, vol. xxx, p. 67, 1914.

This genus, with three species from West Africa and the Congo, has not hitherto been recognised from the southern or eastern part of the African continent. It is placed by Pic near *Asclera*, but the author makes no mention of the palpi or of the abdominal sexual characters. If I have recognised it correctly it belongs to the subfamily of Oedemerinae, and not to the Asclerinae, as witnessed by the long narrow terminal joint of the palpi, the comparatively deep, angular, emargination of the eye, and the strong sexual dimorphism exhibited by the abdominal segments. It is perhaps scarcely distinct from the tropical American genus *Sisenes*, Champ., but the name may provisionally be retained for the African species. These appear to fall into two, or perhaps three, distinct groups according to the formation of the abdominal segments.

(i) *Asclerosibutia*, Pic s.s. (type *A. diversithorax*, Pic, det. ex descr.).

♂♀ in British Museum, 150–200 miles W. of Kambove, 3500–4500 ft., 17th October 1907 (S. A. Neave).

♂. 5th ventral segment strongly bisinuate at apex, massive, not tapering behind, exposing the two large rounded lobes of

the 6th segment, held in a subtectiform position, between the upper edges of which are visible the downward curved tips of the median and tegminal lobes of the aedeagus. The massive nature of the apparatus, while somewhat similar to that of *Nacerdes melanura*, is, without dissection, distinctly suggestive of the genital armature of the Australian Rhynchophorous genus *Psalidura*.

♀. 5th ventral segment widely emarginate at apex with a small projection in the middle of the emargination; the 6th ventral sclerite divided and more or less retractile beneath the 5th, leaving the apex of the ovipositor broadly exposed as it lies in the hollow of the pygidium.

(*A. lineatocollis*, Pic and v. *rufipennis*, n. are similar.)

(ii) *Idgiomima* subgen. nov. (type *A. neavei*, sp. n.).

♂ unknown.

(*N.B.*—The ♂ of *A. violacea*, sp. n. which appears to be closely related to *A. neavei* has armature very similar to the above.)

♀. 5th ventral segment very obtusely angulate at apex, almost concealing the ovipositor when in resting position; 6th sclerite divided as above.

(Includes also *A. marshalli*, *A. abdominalis* and probably *A. violacea*, of which the ♀ is unknown.)

(iii) Subgen. *Idgiomimula*, n. type *A. terminalis*, sp. n.

♂. 5th ventral segment conical, broadly, subrectangularly emarginate at apex so as to reach only half the length of the pygidium, exposing the two comparatively small rounded lobes of the 6th segment, which lie in a horizontal plane and nearly meet posteriorly. Between and beyond them is visible the aedeagus which extends, in the position of rest, to the tip of the pygidium.

♀. 5th ventral segment triangular, extending nearly to the tips of the pygidium; 6th sclerite divided, completely concealed when at rest.

To the first group belong apparently all the species described by Pic. They are larger, more robust-looking insects than those of the other groups, with the elytra more densely pubescent and having a striped appearance owing to the different directions in which the pubescence lies. The suture and outer margin are thickened, and there are two raised costae—one dorsal, arising from above the humeral angle, and one sublateral, arising below it. On all these raised lines the pubescence lies directly backwards. Between the suture and the

dorsal costa it is directed obliquely backwards, outwards from the suture, inwards from the costa, the two series forming a crest midway between the two; between the two costae it forms a similar crest. In the ♀ the last joint or two joints of the antennae are yellowish, but in the only ♂ seen by me they are concolorous black.

In the second group the two costae though present are much less prominent and do not influence the trend of the pubescence. This lies backwards along the suture, then obliquely outwards to a line halfway between the dorsal and sublateral costae, beyond which it lies again backwards. I have seen no ♂ of the South East African species of this group, but *A. violacea*, sp. n. from West Africa is presumed to belong to it.

The third group is necessary for *A. terminalis*, sp. n. which agrees in facies and also in the way in which the pubescence lies with the second, but exhibits certain differences in the posterior abdominal segments in both sexes which seem to separate it rather sharply. It is possible, however, that the discovery of the ♂ of *A. neavei* and its allies may render this distinction less abrupt.

From Uganda the British Museum possesses what is probably a variety of one of the West African species described by Pic :—

A. lineatocollis, Pic var. *rufipennis*, nov.

Black, the thorax and elytra rufous, the former broadly blackish on the sides, the last two joints of the antennae fulvous. The head between the antennal bases obscurely rufous, with pubescence that in certain lights is also rufous.

Locality.—Uganda, Tero Forest, S. E. Buddu; 3800 ft., 26th to 30th September 1911 (S. A. Neave).

Except that it lacks the black apex to the elytra this form appears to be identical with a specimen from Aburi, Gold Coast, that agrees with the description of *A. lineatocollis*, Pic.

Key to the species of Asclerosibutia *Pic.*

1. (8) Elytral pubescence lying obliquely in alternating directions in longitudinal bands, giving the elytra a striped appearance; last joint of antennae usually yellow (♀).
2. (7) Elytra yellow with apex black (West Africa).
3. (4) Thorax uniformly fuscous . . . . . *diversicollis*, Pic
4. (3) Thorax yellow with sides fuscous.
5. (6) Basal joints of antennae reddish . . . . *gabonica*, Pic
6. (5) Basal joints of antennae black . . . . . *lineatocollis*, Pic
7. (2) Elytra entirely yellow (Uganda) . . . var. *rufipennis*, n.

8. (1) Elytral pubescence directed obliquely outwards on dorsal area, not giving a banded appearance, last joint of antennae black (♀).
9. (10) Upper surface entirely dark violaceous (West Africa) . *violacea*, sp. n.
10. (9) Upper surface more or less fulvous (Nyasaland, etc.).
11. (14) Abdomen beneath entirely black or dark.
12. (13) Thorax fulvous with median black vitta ; apical half of elytra and underside blue-black . . . . . *neavei*, sp. n.
13. (12) Thorax entirely fulvous ; apical half of elytra black . *marshalli*, sp. n.
14. (11) Abdomen beneath largely yellow.
15. (16) Black, with prothorax, most of elytra and first four segments of abdomen yellow . . . . . *abdominalis*, sp. n.
16. (15) Yellow, with head, apex and outer margin of elytra, tip of abdomen and tibiae and tarsi of intermediate and posterior legs black *terminalis*, sp. n.

A. (*Idgiomima*) *neavei*, sp. n.

♀. Head and appendages black, thorax rufofulvous with a broad median black vitta, elytra flavotestaceous in basal half, violaceous black in apical half, metasternum and abdomen beneath violaceous black, dorsum of abdomen brilliant violet.

Head and thorax finely rather sparsely punctate and pubescent, pubescence of elytra mainly nearly decumbent but with a few erect stiffer bristles ; on the inside of a line from the humerus to midway across the disc near the apex it is directed obliquely backwards and outwards, and is golden on the anterior half, more cinereous posteriorly; external to this line it is black and directed backwards, thus forming an indistinct crest where it meets the dorsal pubescence.

Length.—9 mm.

Locality.—Nyasaland, Mlanje, 1st to 6th December 1912–1913 (S. A. Neave).

Very distinct in the violet tint of the dark portion of the elytra and of the underside. In this and in the cinereous colour of the pubescence of the dorsal area of the elytra it resembles the West African form *A. violacea*, described below.

A. (*Idgiomima*) *marshalli*, sp. n.

Black, with the prothorax, scutellum, and basal half of the elytra fulvous ; pubescence the same colour as the derm it covers.

Length.—8–9 mm.

Locality.—Mashonaland, Chirinda, December 1901 (G. A. K. Marshall).

Very similar to *N. neavei*, but lacking the dark vitta on the thorax,

the violet tints of the black of the elytra and underside, and the cinereous pubescence on the elytra. *Nacerda latenigra*, Pic, from Benguela, is described as very similarly coloured.

A. (*Idgiomima*) *abdominalis*, sp. n.

Black, with the prothorax, scutellum, elytra except near the tips, and the first four segments of the abdomen yellow.

Length.—8 mm.

Locality.—Nyasaland, Mlanje, 11th December 1912 (S. A. Neave).

A single specimen from the same locality as *N. neavei*, but besides the difference in colour the thorax is much less strongly cordiform, with the dorsal impressions less pronounced.

A. (*Idgiomimula*) *terminalis*, sp. n.

Flavotestaceous, with the head and antennae, the apex and outer margins of the elytra, the intermediate and posterior tibiae and tarsi and the apex of the abdomen black.

♂. Pygidium triangular, projecting considerably beyond the 5th ventral segment ; apex entire ; the 5th ventral segment tapering and rather deeply angularly emarginate at the apex ; the genital armature so far as visible without dissection of the single ♂ is described above. The 4th, 5th, and apex of 3rd abdominal segments black.

♀. Pygidium triangular, not projecting much beyond the 5th ventral segment ; the apex only of the latter with black margin.

Length.—7 mm.

Locality.—Nyasaland, Mlanje, December 1912 (S. A. Neave).

Very similar to the preceding, but besides the difference in colour is of a slighter build with narrower prothorax.

The following West African species appears to be closely related to *A. neavi*, from which it differs in its uniformly violaceous colouring.

A. (*Idgiomima ?*) *violacea*, sp. n.

Slender, dark violaceous above, with the basal joints of the antennae beneath, the maxillary and labial palpi testaceous ; under side and legs piceous with violaceous reflections, clothed with silvery pubescence, pubescence of upper side blackish, except for a broad dorsal patch occupying about the median half of the dorsal area of the elytra, and the scutellum silvery.

Head across the eyes nearly as wide as the elytra, wider than the prothorax, moderately strongly and densely punctate. Antennae

slender, 2nd joint nearly half as long as 3rd (apical joints wanting). Thorax longer than wide, scarcely wider in front or narrowed behind, with a pair of moderately deep depressions about the middle, distinctly more finely and sparsely punctate than the head. Elytra densely and strongly punctate, broadest across the shoulders, but nearly parallel behind them. Anterior tibiae bispinose, basal joint of posterior tarsi about as long as the rest together including the claws, but the whole tarsus only about $\frac{2}{3}$ as long as the tibiae; penultimate joint not much wider than the preceding, all joints except the claw joint with dense flavous pubescence beneath; claws bifid at apex.

♂. 5th ventral segment of abdomen massive, as long as the two preceding together, strongly impressed in the middle; 6th segment visible as two large broadly rounded lobes.

♀. Unknown.

Length.—7–8 mm.

Localities.—Sierra Leone, Old Calabar.

The facies is that of the *Idgiomima* group rather than of the hitherto described species of *Asclerosibutia*, though the genital characters of the ♂ are very similar to those of *A. diversithorax*, Pic. Until the ♀ is known its position must remain more or less doubtful.

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